ORDER

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

6980.5 A

11/18/75

SUBJ: ENGINE GENERATOR TRANSFER PROCEDURES FOR ANTICIPATED POWER FAILURE

1. PURPOSE. To provide instructions for the operation of emergency engine generators during local storm activity.

2. DISTRIBUTION. This order is distributed to division level in the Airway Facilities and Air Traffic Services in Washington headquarters and to the regional Air Traffic and Airway Facilities divisions; to branch level in the overseas Air Traffic and Airway Facilities area offices; to all Airway Facilities sectors; and to all Air Route Traffic 'Control Centers; Airport Traffic Control Towers, and combined stations/towers.

3. BACKGROUND. Power outages, interruptions of service, or abnormal voltage fluctuations are often due to local storm activity. Usually, information on the location and severity of storms is available within the operating area of the facility. When a severe storm is approaching the vicinity, the probability of facility outage because of power failure can be reduced by placing the facility load on engine generator power or, alternately, to have the engine generator operating on the loadbank prior to the arrival of the storm.

4. CANCELLATION. This order supersedes and cancels Order 6980.5 dated 1/19/68, Engine Generator 'Transfer Procedures for Anticipated Power Failures.

5. ACTION. Air Traffic and/or Airway Facilities maintenance personnel shall monitor weather reports and radar to determine when severe storm activity is approaching a facility. At least 30 minutes prior to the estimated arrival of a severe storm in the area of a facility, maintenance personnel will start standby engine generators at ARTCCS, ARSR sites, and other facilities as deemed necessary. After coordination with Air Traffic Control on the facility concerned, maintenance personnel shall take action in accordance with either paragraph 5a or 5b below, This requirement does not apply to facilities where maintenance personnel are not on duty at the time action is required or to the ARTCC after acceptance of the power conditioning system (PCS).

a. Place the facility on engine generator power until storm activity has cleared the area.

b. Place the engine generator on the loadbank until the storm activity has cleared the local area. This procedure will only be used where the loadbank will be automatically disconnected from the engine

generator upon failure of commercial power. Only one engine generator will be started and placed on the loadbank at ARTCC facilities,

6. RESULTS. At an ATC facility, transfer from commercial power to an operating engine generator, either manually or from the loadbank, will be made in less than two seconds, instead of the usual fifteen to twenty seconds required if the engine is not operating.

a. The engine generators will be at operating temperatures, with the voltage and frequency stabilized for optimum operating conditions.

b. Engine generators at ARTCC and ARSR facilities are equipped with load dropping relays which will automatically drop the loadbank and pick up the facility load when the commercial power fails, thus causing only a momentary interruption of facility power.

c. The weekly, monthly, or quarterly test runs of the engine generators may be discontinued where sufficient runs of comparable duration are performed through use of the above procedures.

For WARREN C. SHARP
Director, Airway Facilities Service